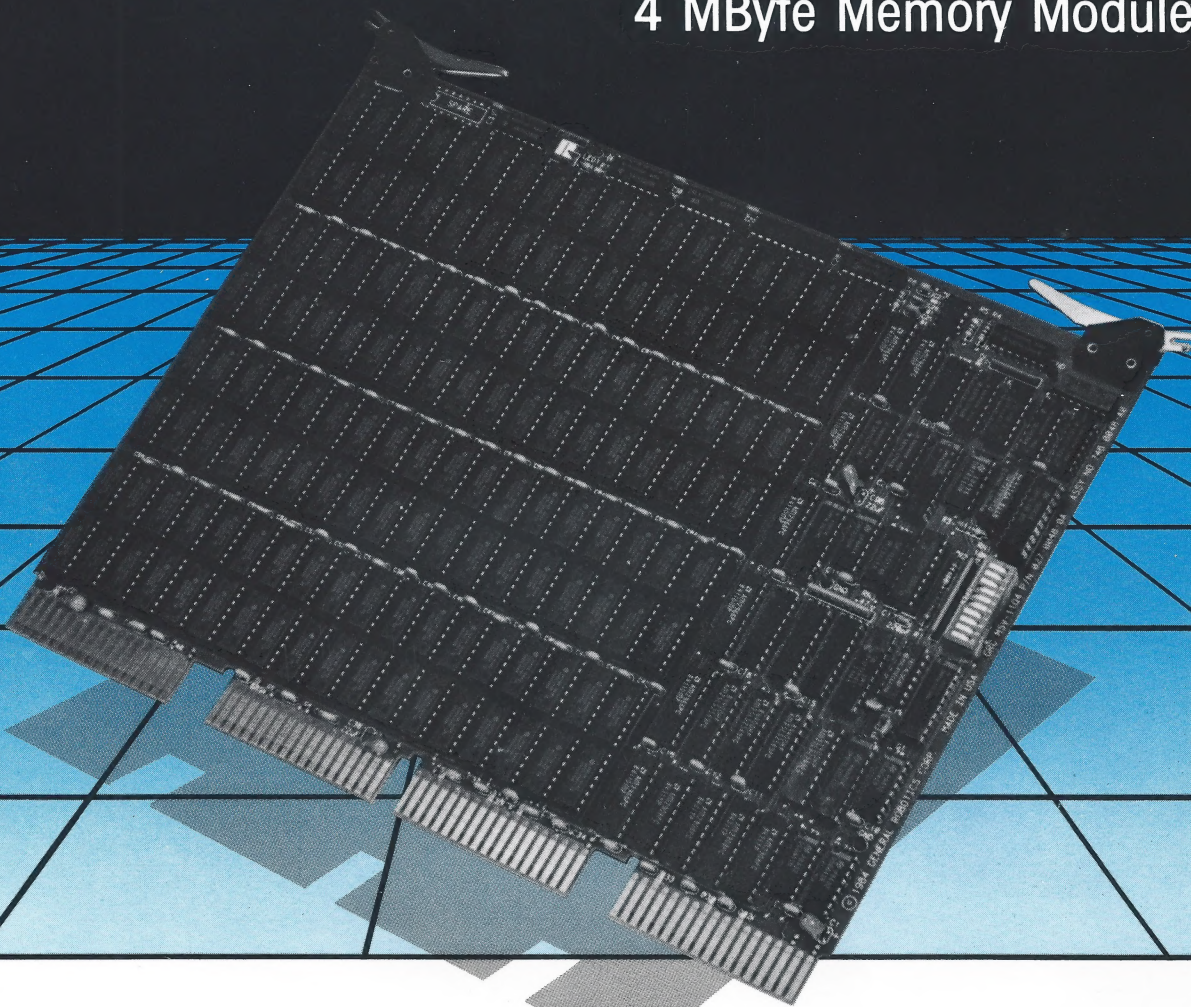


# MSV11-R

## 4 MByte Memory Module



### FEATURES

- Complete DEC hardware compatibility with standard QBUS interface
- 512KB to 4MB configurations
- 22-bit address decoding
- Block mode DMA capability
- On-board refresh and parity
- Software transparency under MicroVMS, RT-11, RSX-11M, RSTS/E, TSX, TSX-Plus, UNIX, MUMPS and other popular operating systems
- All control and interface circuitry contained on a single quad-height module

The General Robotics MSV11-R is a 4MByte memory module that is plug compatible with the DEC QBUS. It can be used in LSI 11 and MicroVAX based systems.

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*UNIX is a trademark of AT&T*

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# Specifications

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## General

The General Robotics MSV11-R uses highly reliable 256K RAM technology to provide 4 MBytes of MOS memory on a single quad-height module. The MSV11-R is a direct replacement for eight or more DEC MSV11-P modules. The integral Direct Memory Access (DMA) facility can have block mode enabled to improve system performance.

The MSV11-R has a 4KB I/O page. To ensure system integrity, the MSV11-R has internal refresh logic and parity control that is fully compatible to the DEC MSV11-P. Parity registers are switch selectable to any of 16 standard addresses. An LED display provides visual determination of a parity error.

The standard version of the MSV11-R uses 150 ns 256K x 1 dynamic RAMS to provide an average read time of 210 ns and a write time of 140 ns.

Use of the MSV11-R is fully supported by standard DEC operating systems, including RT-11, RSX-11M, VMS and RSTS/E, and is completely transparent to user applications.

## Options

- Depopulated MSV11-RX
- Semipopulated MSV11-R from 512 KB to 4MB in 512 KB increments

## Environmental

Temperature

Range: 5 to 60 degrees C operating

Relative Humidity

Range: 10% to 95%, Non-Condensing

DC Power: +5VDC  $\pm$  5% @ 2.8A

Size: 8.43" x 10.457" quad-height module

Distributed By:



**General  
Robotics Corporation**

57 N. Main St. • Hartford, WI 53027, U.S.A.  
Toll Free 1-800-742-5264  
Outside the U.S.A. 414-673-6800  
Telex 269686